### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453

(707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-013316 Address: 333 Burma Road **Date Inspected:** 18-Apr-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes An Qing Xiang, Tu Jun No **Inspected CWI report:** Yes No **Rod Oven in Use:** Yes No N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** Tower

### **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

Tower Assembly Yard, Elevator Support on skin D of West Tower lift 1 (Green Tag No. 12495)

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% and random Visual Testing (VT) of the area previously tested and accepted by ZPMC Quality Control personnel. This QA inspector generated MT report for this date. The members are identified as Tower Components. The weld designations reviewed are as follows.

Z69-0A/F-1-1-W Z69-0A/F-1-2-W

Tower Assembly Yard, Elevator Support on skin D of North Tower lift 1

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% and random Visual Testing (VT) of the area previously tested and accepted by ZPMC Quality Control personnel. This QA inspector generated MT report for this date. The members are identified as Tower Components. The weld designations reviewed are as follows.

# WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Z69-0A/F-1-1-N Z69-0A/F-1-2-N

Bay 11, West Tower Lift 4, A/E Corner Seam (Green Tag No. 12496)

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA inspector generated UT report for this date. The members are identified as Tower Components. The weld designations reviewed are as follows.

WSTL4-2B/L-60A/B WSTL4-2L/L-5A/B

This Quality Assurance (QA) Inspector observed the following work in progress:

BAY11

#### TOWER GRILLAGE PLATE

SAW welding of weld joint 2A located on GTSA5-B/G.

Welder is identified as 042195. ZPMC QC is identified as Mr. Shao Hui Long.

The welding variables recorded by QC appeared to comply with WPS-B-T-2221-B-U3c-S-2.

#### TOWER STRUT PLATE

SMAW welding of weld joint 10A located on ED1-STSA4-6-131M-2.

Welders are identified as 044541 & 044551. ZPMC QC is identified as Mr. Liu Dao Feng.

The welding variables recorded by QC appeared to comply with WPS-B-T-2212-Tc-U5b.

SMAW welding of weld joint 5A located on ND1-STSA4-6-131M-1.

Welder is identified as 040619. ZPMC QC is identified as Mr. Liu Dao Feng.

The welding variables recorded by QC appeared to comply with WPS-B-T-3212-Tc-U5b-1.

## WEST TOWER LIFT 4, FIT LUG

FCAW welding of weld joint 106 located on WSTL4-2K/L.

Welder is identified as 040713. ZPMC QC is identified as Mr. Zhao Mao Mao.

The welding variables recorded by QC appeared to comply with WPS-B-T-2333-Tc-P4-F.

FCAW welding of weld joint 108 located on WSTL4-2K/L.

Welder is identified as 040713. ZPMC QC is identified as Mr. Zhao Mao Mao.

The welding variables recorded by QC appeared to comply with WPS-B-T-4333-Tc-P4-F.

**BAY 10** 

# TOWER FACADE PLATE

FCAW welding of weld joint 27 located on ED1-SFSA3-27.

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Welder is identified as 052075. ZPMC QC is identified as Mr. Zhu Zhong Jie.

The welding variables recorded by QC appeared to comply with WPS-B-T-2132.

SAW welding of weld joint 12 located on SD1-SFSA4-2A/B.

Welder is identified as 207745. ZPMC QC is identified as Mr. Yu Zhi Lai.

The welding variables recorded by QC appeared to comply with WPS-B-T-2221-B-L2c-S.

FCAW welding of weld joint 7 located on ED1-SFSA3-27.

Welder is identified as 057180. ZPMC QC is identified as Mr. Zhu Zhong Jie.

The welding variables recorded by QC appeared to comply with WPS-B-T-2132.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Skyler Guest: 15000422360, who represents the Office of Structural Materials for your project.

Inspected By:	Gaikwad,Umesh	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer